

# **ABSTRACT**

## **INTRODUCTION**

Oesophageal carcinomas are one of the most aggressive human malignancies which are associated with a poor prognosis because most of the cases are in stage 2 or 3 at the time of diagnosis with a high frequency of lymph node metastases. It is important to know what prognostic factors can facilitate diagnosis, optimize therapeutic decisions, and improve the survival of these patients. A member of EGFR family, HER-2/neu is a very useful antigenic marker shown to be expressed in oesophageal carcinomas with increasing evidence of its therapeutic implications.

## **AIM OF THE STUDY:**

Aim is to determine immunological expression of HER-2/neu in oesophageal carcinomas and correlate it with the histopathological grading.

## **MATERIALS AND METHODS:**

This is a prospective study undertaken for a period of one year. Thirty cases of histologically proven oesophageal carcinomas were subjected for HER-2/neu immunoexpression. Membranous staining was considered as positive, intensity of staining was scored and compared with various histopathological parameters.

## **RESULTS:**

HER-2/neu was positive in 41% of SCC and 67% of ADC. HER 2/neu positivity was observed in 66% of poorly differentiated SCCs , 58% in moderately differentiated SCCs and 11% in well differentiated SCCs. With respect to adenocarcinomas, 100% positivity in grade III tumours and 60% in grade II tumours was observed. There was significant correlation with grading, staging and lymph node metastases . Higher grade tumours had higher level of expression of HER-2/neu..

## **CONCLUSION:**

It is concluded that HER-2/neu immunoexpression is significantly higher with progression of tumour grade . Hence, such patients with high grade and lymph node metastases could be benefitted with targeted therapy.

Key words: oesophageal carcinomas, HER-2/neu, membranous